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(21) Application number: **58182560**(22) Date of filing: **29.09.83**(71) Applicant: **TAKEDA CHEM IND  
LTD HAYASHIBARA BIOCHEM LAB  
INC**(72) Inventor: **TODA JUN  
KONNO AKIRA  
KANAMARU TOSHIHIKO  
OKADA SHIGETAKA  
KITAHATA SUMIO  
YOSHIKAWA YOSHIATSU**

(54) **PRODUCTION OF WATER-SOLUBLE STARCHY  
SUBSTANCE, AND PRODUCTION OF FOOD OR  
DRINK CONTAINING THE SAME**

(57) Abstract:

PURPOSE: To produce a water-soluble starchy substance useful for the production of foods and drinks, and having high solubility in water, by treating a gelatinized starch with a branching enzyme, and separating the water-soluble fraction from the product.

CONSTITUTION: The raw starch is gelatinized e.g. by the heat treatment or alkali-treatment of an aqueous suspension of the starch. The gelatinized starch is

dispersed in water, and treated with a branching enzyme to obtain a water-soluble starch. The branching enzyme used in the above treatment is an enzyme capable of converting the  $\alpha$ -1,4-glycoside bond of the starch to  $\alpha$ -1,6-glycoside bond and forming a new branched structure. The enzyme can be obtained from vegetables, animals or microorganisms, and above all, the branching enzyme produced by a bacterial strain belonging to *Bacillus* genus is preferable in view of the yield, etc. The amount of the branching enzyme is about 0.5W50 units per 1g of the gelatinized enzyme.

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